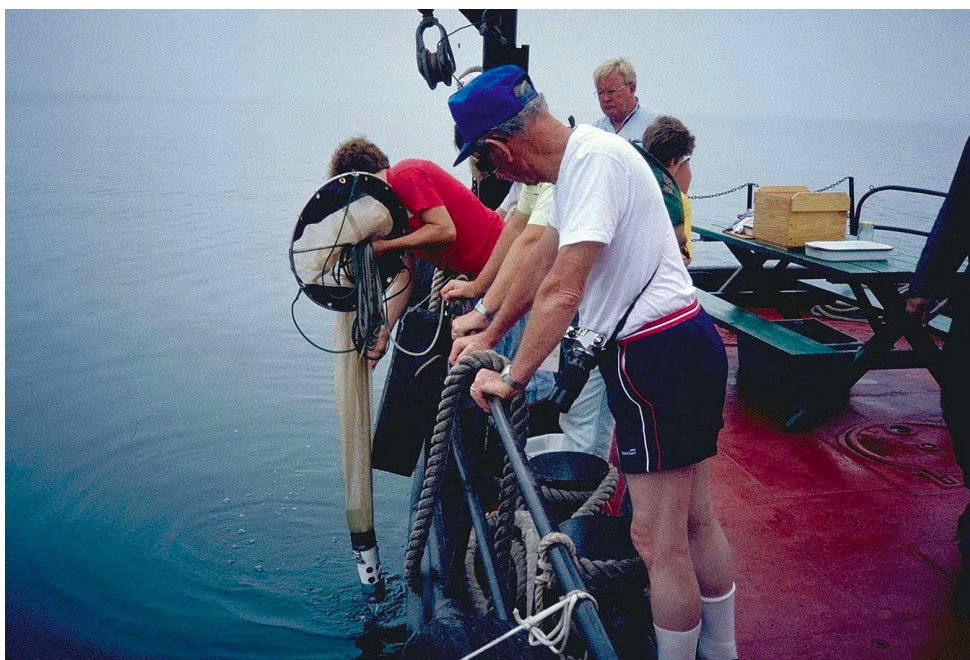


# Chapter 2

## Public Outreach and Education



"LL Smith Jr." Aquatic Education Vessel on Lake Superior, Duluth, MN  
Photograph by: Lake Superior Center

Lake Superior Lakewide Management Plan  
2000

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## **Chapter 2**

### **Public Outreach and Education**

#### **Lake Superior Lakewide Management Plan**

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#### **EXECUTIVE SUMMARY**

The Lake Superior Binational Program has a long history of public involvement in the development of the Lake Superior Lakewide Management Plan (LaMP). In particular, the Lake Superior Binational Forum, the primary public advisory body to the six governments (U.S. EPA, Environment Canada, Province of Ontario, and the states of Michigan, Minnesota, and Wisconsin) responsible for carrying out the zero discharge demonstration project, has been key to establishing an effective multi-sector stakeholder process. The Forum has held many workshops over the years for the purpose of acquiring necessary background information to help develop recommendations and proposals for reducing the Lake Superior nine critical pollutants. The Forum has also published many documents on key issues relating to the LaMP.

In addition, a separate Communications/Public Involvement Committee, comprised of staff from government agencies and their partners, was formed to help expand the network of stakeholders and outreach activities. This Committee has produced documents for the purpose of informing the public about all aspects of the LaMP and the Binational Program.

Other outreach activities that these two groups have been involved with include issuing press releases, setting up an informational web site, developing a Lake Superior Display for use at conferences, supporting and attending outreach “tours” to inform the public, and compiling an extensive mailing list data base to help inform the public.

#### **Future Actions**

After the release of the LaMP 2000 document in April , the following public outreach actions will be taken including (but not limited to):

- Issuance of a Public-Friendly Report on the LaMP 2000 Document
- Development of a Lake Superior Tour for the purpose of informing the public about LaMP 2000 and for receiving input and comment on the document
- Producing a responsiveness summary document in response to public comment on the LaMP 2000 document
- Encouraging more extensive involvement by local and county governments in the Binational Program
- Development of a more extensive commercial-industrial outreach program
- Development of public and organizational participation and commitment to the Lake Superior Vision and inter- and intra-agency outreach

Figure 2-1 shows the various outreach projects, the lead agency for implementation of the projects, and the funding status.

**Figure 2-1. Action Summary**

<b>Project Title/Actions</b>	<b>Committed/ Uncommitted</b>	<b>Lead Agency/ Funding Source</b>	<b>Funded</b>	<b>Needs Funding</b>
Coordinate the Lake Superior Tour 2000 B which consists of the opportunity for agency representatives to provide information to members of the public, as well as gather comments from the public on the LaMP 2000 document and the Binational Program.	Committed	EC, USEPA, and States with the help of other organizations	X	
Information Action-Success Stories.	Uncommitted	EC, USEPA, and States		X
County Government Education & Outreach.	Committed	EPA	X	
Public and Organizational Participation and Commitment to the Lake Superior Vision.	Uncommitted	EPA, EC		X
Intra- and Inter-Agency Education & Outreach on the Vision and Goals of the Binational Program.	Uncommitted	EPA, EC (with all participating agencies)		X

## 2.0 ABOUT THIS CHAPTER

All the partners involved in the Lake Superior Lakewide Management Plan, i.e., States, Provinces and Federal Agencies, the Tribes, industry, the public and others, have long been committed to an open, fair and significant public involvement process. One of the main goals of the Lake Superior Binational Program is, in fact, to promote meaningful public participation and education so as to ensure that the needs and concerns of the diverse population in the Lake Superior ecosystem are met. This section of the LaMP will briefly describe the efforts that have been made to date to include public input and involvement, and will then detail the anticipated future outreach plans for the LaMP 2000 document.

## 2.1 PUBLIC INVOLVEMENT

A major tenet of ecosystem management is the continuous involvement of the public that is inclusive and respectful of all viewpoints and stakeholders. LaMP 2000 is not an end to this process, but provides an opportunity for full public review and input on what has been developed to date, and ongoing involvement in the revisions and updates to come in future LaMP publications. Public input and support will help ensure the actions recommended in the LaMP are carried out, leading the way to restoring and protecting the Lake ecosystem. The key to public support and the program's success is effective communication between the government agencies and the diverse population of the Lake Superior basin.

LaMP 2000 is presented as a working document, based on existing information. It was the goal of the Binational Executive Committee to provide a *current* foundation for discussion not necessarily a *complete one*. The LaMP will be modified every two years based on new findings and public input. This is a necessary step if we are to institute adaptive management on an ecosystem scale.

With the release of this LaMP 2000 document, the Public Involvement Subcommittee is responsible for gathering comments submitted by the public and ensuring that the proper committees receive the comments in order to take them into consideration. Responses will then be prepared so that those who made submissions will know what happened as a result of their comments. Formal comment on the LaMP document will be received for 60 days following its release. As the LaMP 2000 report is available on our web sites, it is also possible to use the on-line submission form to send your comments to us. They can be found at either [www.cciw.ca/glimr/lakes/superior/involved.html](http://www.cciw.ca/glimr/lakes/superior/involved.html) or [www.epa.gov/glnpo/lakesuperior/involved.html](http://www.epa.gov/glnpo/lakesuperior/involved.html). We also plan to set up a page on the web site that will be used to display the comments. This will allow members of the public to review comments already received by the agencies. Information on repositories for the Lake Superior LaMP can be found at the above web site addresses.

Over the coming months, there will be public meetings in the Lake Superior basin to educate stakeholders about the LaMP, receive their input and to encourage actions to improve the ecosystem of the Lake Superior basin. Many of the meetings will be held in local Areas of

Concern so that we can continue to better integrate the LaMP and RAP processes. A short summary of each of the RAPs can be found in [www.epa.gov/glnpo/aoc](http://www.epa.gov/glnpo/aoc).

We invite you to stay involved in the LaMP process after April of 2000. As actions are implemented and evaluated, chapters are revised, new data gathered and analyzed, this information will be placed on our web site and listed repositories (which can be accessed at the web site) for public review and input. Although the LaMP document will not be published again until April of 2002, there will be many opportunities for input and involvement during the two year period.

## **2.2 PUBLIC OUTREACH/EDUCATION EFFORTS TO DATE**

When the Lake Superior Binational Program was first started, public involvement activities were carried out primarily by the Binational Forum (see section below). As the Program matured, it became apparent that the government agencies and their partners needed their own separate public outreach mechanism. A separate group, therefore, was formed entitled the Communications/Public Involvement Committee. Over the years, the two groups have worked closely together, complementing each others' efforts to involve the Lake Superior population.

### **2.2.1 Lake Superior Binational Forum**

Since 1991, the Lake Superior Binational Forum has served as the principal public advisory body to the governments responsible for carrying out the IJC's 1990 recommendation that Lake Superior be a demonstration area where no point sources discharge of any persistent toxic substance would be permitted. The purpose of the Forum is to further consultation and participation among government, industry and environmental stakeholders on the restoration and protection of Lake Superior. The Forum is composed of Canadian and American stakeholders representing environmental, Tribal/First Nations, industrial, business, health and academic interests.

The Forum has held various technical workshops since 1991 for the purpose of acquiring necessary background information to help develop proposals for phase-out schedules and reduction recommendations. These recommendations on the nine critical pollutants, for example, may be found in the Stage 2 Lakewide Management Plan. These workshops have been held on mercury, sustainability indicators, PCBs and pesticides, to name a few. A more complete list and description of all the workshops sponsored by the Forum may be found in **Addendum 2-A**.

In addition to sponsoring workshops, the Lake Superior Forum has published a number of reports and documents, ranging from assessing public attitudes toward pollution prevention, to providing feedback and comment on Lake Superior ecosystem objectives and principles. A complete list of Forum accomplishments may be found in **Addendum 2-A**.

### **2.2.2 Lake Superior Tour**

In the Fall of 1999, The Lake Superior Alliance, an international coalition of community groups, sponsored a series of public meetings around the Lake Superior basin on the LaMP. The main purpose was to outreach to the public on the Lake Superior Lakewide Management Plan and Binational Program in general, and the Stage 3 Chemical Chapter of the LaMP in specific.

Seven public meetings were held in the cities of Thunder Bay, Wawa, Sault Ste. Marie, Marquette, Houghton, Ashland and Duluth. These meetings included speakers from the USEPA, Environment Canada, the Province of Ontario, States, local and regional environmental groups, and the Binational Forum.

In general, the public meetings took the form of government speakers giving a brief history and synopsis of the LaMP, followed by a question and answer session. Findings, issues and questions included the following:

- Overall good acceptance of the LaMP but a perceived need for better integration between government entities at the various levels.
- General unawareness on the part of the public about the LaMP, including such questions as was it regulatory or voluntary; how did it integrate with other ongoing programs; how can local groups participate more fully, and how can groups “sign on” to recommendations.
- Concern that the document was too long and technical, and that there were too many recommended actions on the chemical portion to establish accountability.

Another Lake Superior Tour is anticipated over the coming months in conjunction with the release of the LaMP 2000 document (see below).

### **2.2.3 Documents and Press Releases**

The Lake Superior Workgroup released two major documents in 1999. In July of 1999, the LaMP Stage 2 Report was released, setting targets and timeframes for reductions of critical pollutants to Lake Superior. In November of 1999, a report entitled “Lake Superior: Lakewide Management Plan, Stage 3, Reducing Critical Pollutants” was released. Public comment and input was solicited on the proposed strategies to reduce the nine critical pollutants into Lake Superior. Media advisories/press releases were released to the media and public in Canada and the United States to announce the release of both documents. These chemical reports are available on the web at [www.cciw.ca/glimr/lakes/superior/pubs.html](http://www.cciw.ca/glimr/lakes/superior/pubs.html) or [www.epa.gov/glnpo/lakesuperior/pubs.html](http://www.epa.gov/glnpo/lakesuperior/pubs.html).

## 2.2.4 Activities of the Communications/Public Involvement Committee

The Binational Program has produced various documents and brochures for the purpose of informing and educating the public. These documents include a general informational brochure on the who, what, why and scope of the Binational Program, as well as a brief introduction of each committee on the Lake Superior Workgroup. Each individual committee has also produced fact sheets which outline the goals and objective of the committee, with past and anticipated activities. Contact information for committee co-chairs was listed on each fact sheet as a means to create a direct link to agency representatives. These documents are available in this report as **Addendum 2-B**.

The Binational Program has developed a traveling display as a means of outreach and education to the general public. This display has been, and will continue to be, used as a means to publicize Lake Superior and the Binational Program at public meetings, seminars, conferences, etc. The display includes a large photographic display of the lake, with space for fact sheets, brochures, and other documents on the lake. The display booth is staffed by members of the Binational Program. In 1999, the display booth was utilized at the Great Lakes Water Quality Forum, hosted by the International Joint Commission in Milwaukee, Wisconsin and at the tour of meetings in the Lake Superior basin, hosted by the Lake Superior Alliance.

The Committee has been revising the Lake Superior Binational Program web site which consists of a home page and the following-supporting pages: ***What's New***, which includes the most current LaMP report, meeting minutes, and upcoming Lake Superior Binational Program events; ***Upcoming Events***, which includes Forum meeting schedules and notices of Lake Superior related workshops and public meetings; ***Lake Superior Binational Program***, which defines the program components, the theme committees, and the partners involved in the Binational Program; ***Publications***, which consists of a list of Lake Superior related reports and documents that can be read on-line; ***How Can I Get Involved?***, which gives a list of topics for public consideration that can be read on-line; ***Binational Forum***, which gives a brief definition of the Forum, the Vision statement, membership, upcoming events, meeting minutes, publications, and accomplishments of the Forum; ***Chemicals of Concern***, which lists the nine zero discharge chemicals of concern and explains their use; ***Other Links***, which gives a list of other related sites that might be of interest to the public; and ***FAQs***, which provides a list of questions most asked by the public and the answers.

## 2.3 FUTURE DIRECTIONS: POST-APRIL 2000 PUBLIC OUTREACH/ EDUCATION

Based on the reaction of the public to the Stage III Chemical LaMP, the partners made the decision to produce a “public friendly” version of LaMP 2000. Members of the public who attended the meetings told us that the Stage III report was too technical and too complicated. They said that they would like to see a report written in active prose with use of graphics.



As a result of this input, partners of the Lake Superior Binational Program committed to a complete LaMP 2000, plain language version. It consists of a summary of each of the chapters of the full document.

Another outcome of the tour of meetings in November 1999, was a commitment for a series of “open houses” after the release of the LaMP document 2000. The public indicated that the opportunity to meet with agency staff face-to-face was very helpful to their understanding of the LaMP and that they would like to see more meetings after the release of the LaMP document. As a result, the partners decided that there would be a series of tours, in the form of open houses, held in the Lake Superior basin during the public comment period after the release of the LaMP 2000. These open houses will give agency representatives the opportunity to provide information to members of the public as well as gather comments from the public on the document.

It is intended that the format will consist of a brief presentation about the document, followed by the occasion for attendees to go to booths to meet with members of the various technical committees to discuss the portions of the document that are of specific interest to them. This format, while providing an overall framework and context through the presentation, will allow for one-on-one discussions and information sharing. At the same time it will allow agency members the opportunity to learn the public’s reaction to the LaMP document.

As the LaMP 2000 report is available on our web sites, it is also possible to submit comments on-line. For this purpose, we have set up an on-line submission form at either:

**[www.cciw.ca/glimr/lakes/superior/involved.html](http://www.cciw.ca/glimr/lakes/superior/involved.html)** or

**[www.epa.gov/glnpo/lakesuperior/involved.html](http://www.epa.gov/glnpo/lakesuperior/involved.html)**.

We also plan to set up a page on the web site that will be used to display the comments. This will allow members of the public to review comments already received by the agencies.

All comments from the public on the LaMP 2000 document will be distributed to the appropriate committees for consideration. The committees will respond to all comments. Comments made during the Public Comment period will be incorporated into a document called a “Responsiveness Summary”.

Another means of communicating with the public on the document, will be a toll-free number where people can call, either to request information or to leave their comments. This number is **1-888-301-LAKE (1-888-301-5253)**.

A mailing list is being compiled for each of the theme committees (Developing Sustainability, Chemical, Habitat, Aquatic, Terrestrial Wildlife Communities, and Human Health) to keep the public informed of any new developments in the Lake Superior basin and to provide them with the opportunity to comment. The mailing list will include both U.S. and Canadian government agencies; tribal organizations and First Nations; environmental groups and public advisory groups.

Assembling material to inform the public on progress towards restoring and protecting Lake Superior is another role the committee fulfills. In that function, the committee is working on two projects - Success Stories and Frequently Asked Questions - for distribution and inclusion on the web site.

The Binational Program works in partnership with other organizations towards a common goal of a healthy and safe Lake Superior. Success stories enable all to share accomplishments and achievements in the hope that others can learn from those experiences and put environmentally friendly ideas and techniques to work in their area. The stories let citizens know the vast amount of positive change that can occur by working together; and will act as a motivating force to garner both financial and volunteer support. These examples will be gathered and distributed to local media outlets in the Lake Superior basin.

Another means of providing information on progress of the Lake Superior Binational Program is in the form of Frequently Asked Questions. The committee will put together a collection of these questions and post questions and answers on the binational web sites. These may also be provided to media outlets as information pieces.

## **2.4 CONCLUSION**

The partners involved in the Lake Superior Binational Program feel that these activities will meet the objectives of informing and educating the public about the program, involving the public in the decision making process and educating and motivating stakeholders into action. These agencies are mindful that involvement by people representing a wide range of interests is essential to the success of the Lake Superior Binational Program. Public input and support will help ensure that actions recommended in the program are carried out, leading the way to restoring and protecting Lake Superior.

## **ADDENDUM 2-A**

### **FORUM WORKSHOPS AND ACCOMPLISHMENTS**

#### **1. Forum Workshops**

##### **1.1 Mercury Workshop**

On June 4, 1993, the governments presented the full Forum with mercury loading information. At this meeting, the concepts of “Big Easy” versus “Little Hard”, the asymptotic curve, use trees and baseline year were introduced. The size of future reductions was discussed along with possible actions that would meet a proposed load reduction schedule. This discussion guided the format for the future chemical workshops on PCBs, pesticides and chlorinated organics. The Zero Discharge Committee refined the preliminary recommendations into a set of reduction targets and guiding principles. When these recommendations were adopted by the full Forum, they also established a procedure for load reductions for the other chemicals. The Forum mercury recommendations were submitted to the governments in October 1994.

##### **1.2 Economic Incentives Workshop**

In October 1993 a Forum-sponsored Symposium on Economic Incentives for the Implementation of Zero Discharge of Persistent Toxic Chemicals in the Lake Superior Basin was held at the Michigan Technological University in Houghton. The purpose of the Symposium was to identify specific economic instruments to act as incentives for the implementation of zero discharge.

##### **1.3 Sustainability Indicators Workshop**

A Workshop on Sustainability Indicators facilitated by J. Cantrill of Northern Michigan University was held in January 1995. At this meeting, participants generated a wide range of sustainability indicators and by consensus selected the twenty indicators outlined in the document “Ecosystem Principles and Objectives, Indicators and Targets for Lake Superior”.

##### **1.4 PCB Workshop**

A PCB Workshop was held January 26, 1995 at Lakehead University. The goals were to discuss PCB sources and opportunities for reduction and/or elimination, to propose timelines and scheduling for reduction/elimination and to develop recommendations. Recommendations were submitted to the governments in April 1995.

## **1.5 Pesticides Workshop**

A Pesticides Workshop was held on February 27, 1995 at the Western Lake Superior Sanitary District (WLSSD) in Duluth. Information was presented on the characteristics, use and status of such pesticides as Aldrin, BHC, Chlordane, DDT, Dieldrin, Dicofol, Heptachlor, Hexachlorobenzene, Mercury and Toxaphene. Forum recommendations were submitted to the governments in April 1995.

## **1.6 Dioxins and other Chlorinated Organics Workshops**

Two workshops were held on dioxin, hexachlorobenzene (HCB) and octachlorostyrene (OCS). The first, on March 30, 1995, included presentations on sources and processes that create these chemicals. Since the first workshop only included speakers from government and industry, a second mini-workshop was held on June 8, 1995 that included a speaker from an environmental group. Additional updates on dioxin studies were also presented by the governments. A set of recommendations were adopted by the full Forum at that time, but several absent members desired to have additional input. The Zero Discharge Committee then met several times in conference calls and had an additional face-to-face meeting on August 21 to refine the recommendations. Consensus of the full Forum was achieved in Duluth, MN on September 22, 1995, the day before the IJC Biennial meeting began in Duluth.

## **1.7 Economic Instruments and Modeling Workshops**

The importance of economic modeling was discussed at the November 1993 Symposium on Economic Instruments for the Implementation of Zero Discharge of Persistent Toxic Chemicals in the Lake Superior Basin at Michigan Technological University. A model produced by Laurie Gravelines, MNR economist from Sault Ste. Marie, has been used in Canada for forest management planning. In November 1996 in Two Harbors, MN, the Forum held a workshop on economic modeling. Dr. Pat Welle, Department of Economics, Bemidji State University made a presentation entitled "Ecological-Economic Modeling and Sustainability: Conceptual Foundations for the Lake Superior Region". The purpose of the workshop was to discuss the foundations of ecological-economic modeling and its potential for policy and planning. The Workshop also highlighted functions and processes included in a socio-economic-ecological model in order to enhance understanding of how these three components are linked.

## **1.8 Sustainability Workshop**

A Sustainability Workshop was held at the Sigurd Olson Environmental Institute in Ashland, WI in September 1997. Chris Maser, advocate for community sustainability, was the keynote speaker and facilitator of the workshop. Case studies were developed by Forum members on the areas of Chequamegon Bay, Nipigon River/Bay and Pukaskwa National Park to be used as models of sustainability in the Lake Superior Basin. This Workshop was a catalyst in getting the Marquette area citizens to form the Marquette

Sustainability Council. A grant from the Lawson Valentine Foundation was received to be used by community groups around the Basin to work on local sustainable development projects and to create their own community vision based on the Forum's vision for the protection and restoration of Lake Superior.

## **1.9 Pulp and Paper Sector Workshop**

The Forum sponsored a Pulp and Paper Sector Workshop in Grand Marais, MN in June 1998. Workshop goals included identifying how forestry and pulp and paper industries can contribute toward meeting the goals of the Program, identifying areas that need focus for future accomplishments, using public input to make recommendations to the governments regarding issues which should be considered by government when addressing the forestry and pulp and paper sector, and building partnerships between the stakeholders in order to accomplish the goal of virtual elimination by the year 2020. Recommendations on forest product industries were finalized on February 19, 1999 and forwarded to Basin governments.

## **1.10 Progress Toward Zero Discharge**

A workshop on Progress Towards Zero Discharge was held in conjunction with the November 1998 Forum meeting in Two Harbors, MN. This workshop was designed to report on progress being made on the reduction of nine persistent, toxic and bioaccumulative substances found in Lake Superior. Reports were made on the status of load reductions as well as overall reductions in the U.S. and Canada. Areas needing further work constituted one portion of the workshop. The status of the Binational Toxics Strategy was reviewed by Environment Canada and the U.S. Environmental Protection Agency. Some solutions offered by workshop participants to speed up progress toward achieving zero discharge included: consumer lifestyle changes, greater incentives for change, education, enforceable international laws, greater citizen involvement, greater political will and leadership, regulations requiring full-cost accounting, and federal funds for demonstrating local successes.

## **1.11 Effects on Human Health from Environmental Exposure**

In November 1999, the Forum held a health sector seminar "Effects on Human Health from Environmental Exposure." The goal of the seminar was to heighten public awareness of the effects of environmental hazards and contaminants on human health. It included reports from Health, the Canadian Institute for Child Health, Minnesota Department of Health and the Ontario Ministry of the Environment. Approximately 80 people attended the conference. An exhibit hall included displays from 12 agencies.

## **2. Forum Accomplishments**

### **2.1 Basin Attitudes Report on ZD and P2**

In late 1991 and early 1992, the U.S. and Canadian Co-chairs of the Forum met with thirty-one stakeholders from around the basin to identify attitudes and activities in pollution prevention and toxics reduction. Those interviewed included municipalities, industries, environmental groups, chambers of commerce, power companies, and First Nations. The report *Lake Superior Water Quality: A Sampling of Regional Attitudes and Perceptions* was released in August 1992.

The Report identified a number of important issues that influenced some of the priorities set by the Forum. Through the data-gathering and interview process it became clear that there was a lack of understanding and major concerns by municipalities and industry as to the meaning of and implications of the zero discharge program. Industry clearly indicated its dissatisfaction with lack of clear, predictable regulations, and unrealistic deadlines set by government. Municipalities were unhappy with the lack of adequate support from federal, provincial and state governments. Environmental groups confirmed their enthusiasm for achieving the goal of zero discharge. The environmental groups viewed zero discharge as critical for a healthy ecosystem, including economic health. First Nations expressed concerns about toxins in fish and wildlife.

The common themes that arose were the *desire for greater cooperation among governments, industry and the environmental community and a desire to address environmental issues with scientific facts rather than emotion.*

### **2.2 Lake Superior Magazine Achievement Award**

In announcing the Forum as the 1994 award winner, editor Paul Hayden noted that “The Binational Forum is a platform for all the many interest groups around the lake to express and to vote for their particular viewpoints about pending efforts to reduce toxic discharges into Lake Superior. The diversity of the membership sometimes gets in the way of speedy action, but gives the Forum its credibility. Even when they have not reached agreement, their success is that they are still sitting at the same table...”

### **2.3 Community Development Organizations Survey**

In 1996 the Transition Economics Committee spearheaded the development of an annotated list of community development organizations in the Lake Superior Basin. The purpose was to provide a document to be included in Volume III, Broader Program for Non-Chemical Stressors; Part 4, Existing Programs (Iwachewski, January 3, 1995), in the same manner that Forum recommendations had been included in the LaMP; and to act as a resource document for sustainability work.

## 2.4 Ecosystems Principles and Objectives

The Superior Work Group spent several years developing a document on ecosystem objectives and principles for Lake Superior. The intent of the discussion draft document is “to expand the broad objectives of *A Vision for Lake Superior* into more specific ecosystem principles and objectives, to facilitate progress towards a set of informative ecosystem indicators, with quantitative targets, and to provide guidance for land and water management in the Lake Superior ecosystem”. The Forum provided feedback and recommendations to the Work Group on the draft document. *Ecosystem Principles and Objectives, Indicators and Targets for Lake Superior* was released in September 1995.

## 2.5 Outreach

The Forum, as well as having an advisory role for providing input to the governments, is also responsible for providing outreach/communications strategies to educate the public about, create public awareness of and encourage public support of the mandate of the Binational Program. A public information campaign launched September 1997 included an updated Program/Forum brochure, the development of a 30-second video plus radio script for TV and radio stations around the Basin, and the establishment of a toll-free information number (1-888-301-LAKE).

Ongoing outreach activities include:

- Media coverage for Forum meetings, recommendations, issues.
- A slide show developed in 1996 and revised in 1999 to be used by Forum members for public presentations about the Forum/Program in their respective communities.
- Funding from private foundations (\$15,000) to improve and expand the Forum’s public outreach efforts.
- Development of a basin-wide community mini-grant program to enable communities to better educate citizens about protecting and restoring Lake Superior.
- Initiation of a basin-wide educational sign program with a watershed focus and featuring a toll free number for more information.
- Creation of a Forum web page in 1997  
(<http://www.cciw.ca/glimr/lakes/superior/forum/ls1.html>)

## ADDENDUM 2-B COMMITTEE FACT SHEETS AND LAKE SUPERIOR BROCHURE

### LAKE SUPERIOR BINATIONAL PROGRAM



## AQUATIC COMMITTEE

### WHAT IS THE LAKE SUPERIOR BINATIONAL PROGRAM'S AQUATIC COMMITTEE?

The aquatic committee is comprised of fish biologists and managers from federal, provincial and state agencies and tribal authorities within the Lake Superior Basin. The committee is responsible for developing the Lakewide Management Plan (LaMP) for the aquatic community of Lake Superior. A draft outline for Stages 1 and 2, and a Stage 3 project list will be delivered to the Lake Superior Workgroup by April, 2000, and the final Stage 1, 2, and 3 documents by April, 2001. These LaMP documents should not be viewed as final products, but rather as progress reports on the LaMP.



### WHAT ARE THE BASIC HABITAT TYPES WITHIN THE LAKE SUPERIOR BASIN?

LaMPs will be developed for each of the five basic habitat types within the Lake Superior drainage basin. Each habitat type has its own distinct fish and aquatic community, as well as its own specific stressors and management issues. The five basic habitat types are:

- **Inland lakes** - include such areas as the natural heritage lake trout lakes of northeastern Minnesota where agencies currently practice hands-off management. Other inland lakes include the natural lake trout lakes of northwestern Ontario where exploitation is the primary stress along with acid rain, and the lakes and tributaries in the Iron Range of Minnesota affected by mining and acid rain. A last example is the natural lakes of northwest Wisconsin where mercury contamination, logging, and agriculture practices all stress the systems.
- **Tributaries** - habitat that is defined as those rivers and streams that are not subjected to the seiche of Lake Superior. The upper St. Louis River area is an example of habitat loss and degradation, particularly of species like lake sturgeon. Other important tributaries include



those streams in the Keewenaw Peninsula area from the peninsula to Marquette, where exploitation has reduced the abundance of brook trout.

- **Embayments** - large bays or estuaries along Lake Superior that are affected by seiche in Lake Superior. These include man-made harbors. Embayments that have been subjected to man-made stressors include the St. Louis estuary.
- **Nearshore and Offshore waters** - habitat types probably least affected by man's activities. Nearshore waters are less than 80 meters deep and adjacent to the basin of Lake Superior along the main shoreline of Lake Superior. Offshore waters include all areas of Lake Superior deeper than 80 meters.

## WHAT IS THE AQUATIC COMMITTEE DOING TO IMPLEMENT ITS GOALS?

The committee will incorporate Stages 1 and 2 into one document, utilizing the 1992 State of the Lake report; fish community objectives; the discussion paper on fish community objectives; lake trout rehabilitation plans; the lake sturgeon, walleye, and brook trout rehabilitation plans; and the Targets and Indicators and Ecosystem Principles and Objectives document.

The aquatic committee will consult with experts from other disciplines to develop action plans for lower trophic levels of Lake Superior to monitor phytoplankton, zooplankton and benthic communities.

## HOW WILL THE AQUATIC COMMITTEE MONITOR THE LaMP?

In Stage 3, the committee must identify completed and active, ongoing projects. Examples of these efforts are standardized seasonal gill net surveys, siscowet surveys, forage surveys, diet summaries, juvenile index surveys in streams, monitoring for abundance of anadromous adults in streams at fishways and traps; stream population surveys; sea lamprey index surveys; genetic stock analysis; contaminant surveys; standardized sturgeon netting; brook trout production and netting; ruffe surveillance program; and lake trout modeling efforts.

The committee will also complete a survey of habitat rehabilitation projects within the Lake Superior drainage basin. The purpose of the survey is to identify where rehabilitation efforts have taken place and what problems led to the efforts in the first place. The aquatic committee will also ascertain whether the Areas of Concern (AOCs) have produced impairments that have local or lakewide effects.

## PROJECTS OF THE AQUATIC COMMITTEE

The aquatic committee identified and prioritized several research projects necessary to either quantify and delineate habitat, or monitor health of the aquatic community. These projects are important to the Stage 3 process and are shown below in order of priority.

- **Acoustics of Prey Fish**

Objectives: Develop target strength relationships for the Lake Superior fishes; define spatial, seasonal and temporal scales of the work; and, to develop a plan for monitoring the pelagic fish community.

Product: Plan for implementing acoustic work on Lake Superior.

Duration: 1-2 years

- **Habitat Mapping**

Objective: Identify and quantify critical habitat for key fish species that are both indicators of aquatic health and fish community stability.

Product: Survey of areas that are not already protected. Examples are Gull Island Shoal, Caribou Island, Michipicoten Island, Thunder Bay, Gros Cap, Traverse Island, Buffalo Reef, and other historic lake trout spawning areas in both the offshore and nearshore waters of the lake.

Duration: This project will endure until all important areas have been mapped.

- **Rehabilitation of Lake Sturgeon**

Objectives: Determine current population status and abundance in historic spawning streams; quantify sturgeon spawning habitat in these streams.

Product: Quantification of fish habitat and identification of its distribution within the lake, called for by the current rehabilitation plan, fish community objectives, and the Binational Program.

Duration: 5-6 years, assuming two streams per year are completed.

- **GIS-based Maps of Fish Habitat**

Goal: Visualize fish habitat in Lake Superior by identifying, quantifying and illustrating that habitat based on GIS maps.

Product: Add data on fish habitat to existing Habitat Committee project to develop GIS-based maps of habitat in the Lake Superior basin. Data would include attributes associated with each stream listed in the Lake Superior Technical Committee discussion paper, and draw in Lake Superior Technical Committee and GLIFWC data to be incorporated into current databases.

## **CONTACT INFORMATION**

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## LAKE SUPERIOR BINATIONAL PROGRAM



# CHEMICAL COMMITTEE

## BACKGROUND ON THE LAKE SUPERIOR BINATIONAL PROGRAM

The chemical committee is one of six technical committees of the Superior Work Group of the Binational Program to Restore and Protect the Lake Superior Basin (Binational Program). The Binational Program began in 1991 through an agreement between the federal governments of Canada and the United States, the province of Ontario, and the states of Minnesota, Wisconsin and Michigan. An objective of the Binational Program is to produce a Lake Superior Lakewide Management Plan (LaMP) that incorporates the interests of multiple stakeholders in the basin including active citizens groups, industry and tribes. The Binational Program includes a zero discharge demonstration for nine persistent bioaccumulative toxic pollutants. The targeted pollutants are dioxin, mercury, hexachlorobenzene, octachlorostyrene, polychlorinated biphenyls (PCBs); and the pesticides chlordane, DDT, dieldrin, and toxaphene. Progress on the zero discharge demonstration program is reported through the LaMP. The Great Lakes Water Quality Agreement (GLWQA) between Canada and the United States requires the countries to prepare LaMPs. The guidance provides the intent to preserve and protect the chemical, physical, and biological integrity of the Lake Superior Basin while restoring impaired beneficial uses.



## WHAT IS THE CHEMICAL COMMITTEE?

The chemical committee is comprised of technical staff from the federal, provincial, state and tribal organizations within the Lake Superior Basin. The committee provides a means of communication and coordination between these organizations to meet their similar objectives. The focus is on cooperative agreements with industry and providing accurate information to stakeholders regarding the release of toxic chemicals into the environment.

## WHAT ARE THE OBJECTIVES OF THE CHEMICAL COMMITTEE?

The chemical committee takes its objectives from the Great Lakes Water Quality Agreement (GLWQA) and the Lake Superior binational agreement. The Lake Superior binational agreement includes a Zero Discharge Demonstration objective: "to achieve zero discharge and zero emission of certain designated persistent bioaccumulative toxic (PBT) substances which may degrade the ecosystem of the Lake Superior basin". In addition to the PBTs, the GLWQA includes numerous other critical pollutants which the LaMP is to address regarding impaired beneficial uses. To achieve both objectives, the chemical committee will implement the four stages of the chemical portion of the LaMP: Stage 1: Define the extent of chemical pollution; Stage 2: Provide chemical load reduction schedules; Stage 3: Recommend remedial measure to fulfill the load reduction schedules; Stage 4: Monitor critical pollutants until Lake Superior no longer has chemical related impairments. Stages 1 and 2 are complete, Stage 3 reduction activities have been ongoing but a formal document will be released in April 2000 and Stage 4 will take the form of iterative updates.

## PRODUCTS OF THE CHEMICAL COMMITTEE

The chemical committee has completed Stages 1 and 2 of the chemical portion of the LaMP and is currently developing Stage 3. The chemical committee has also completed the Lake Superior Binational Pollution Prevention Strategy and the Chemical Chapter of the *Ecosystem Principles and Objectives* document.

## CONTACT INFORMATION

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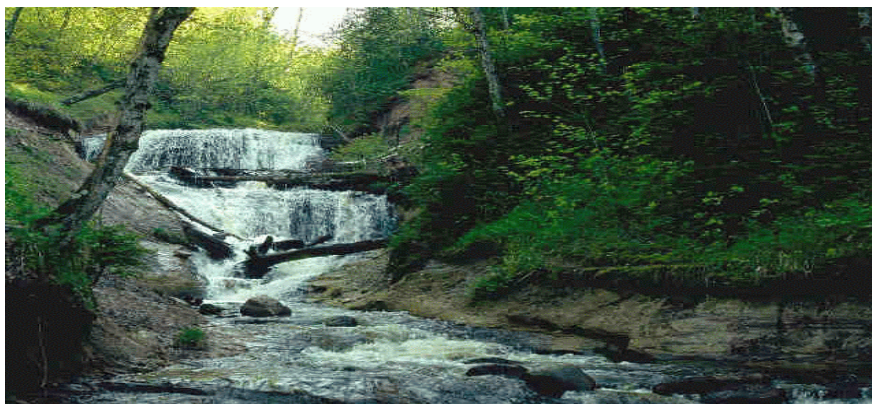
LAKE SUPERIOR BINATIONAL PROGRAM



## DEVELOPING SUSTAINABILITY COMMITTEE

### WHAT IS SUSTAINABLE DEVELOPMENT?

Sustainable development is a strategy by which communities seek economic development and approaches that also benefit the local environment and quality of life. Sustainable development provides a framework under which communities can use resources efficiently, create efficient



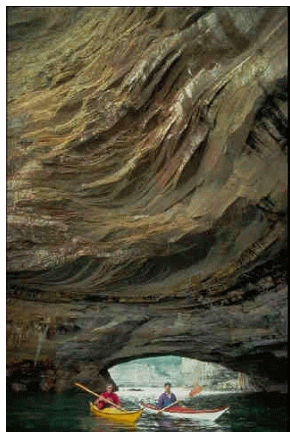
infrastructures, protect and enhance quality of life and create new businesses to strengthen their economies. Sustainable development offers real, lasting solutions that will strengthen our future.

### WHY IS SUSTAINABLE DEVELOPMENT IMPORTANT TO LAKE SUPERIOR AND THE LAKE SUPERIOR BINATIONAL PROGRAM?

In addition to focusing on "zero discharge", the *Binational Program to Restore and Protect the Lake Superior Basin* also coordinates a broader program to protect and restore the integrity of the Lake Superior watershed ecosystem. Since its inception, the broader program for the Lake Superior region has identified the goal *of sustaining a human presence in the watershed that does not jeopardize the biotic and abiotic fabric of the Basin*.

### Goals and Objectives of the Developing Sustainability Committee

To begin implementing a long-term strategy for sustainability in the Lake Superior Basin, the Lake Superior Work Group (LSWG) of the Binational Program includes a "Developing Sustainability Committee"(DSC). The DSC's two main objectives are to:



- Identify, monitor and communicate to the LSWG social and economic indicators relevant to achieving the goal of restoring and protecting the Lake Superior basin.
- Coordinate selected sustainability projects in the basin.

In this context, the DSC draws upon the insights of its members and their respective networks to evaluate the status of regional sustainability along the lines suggested by the tenets of ecological design criteria, life cycle analysis, industrial ecology, environmental economics, and general systems analysis.

Substantive projects or activities are driven by the following sorts of questions:



- To what extent do emerging sustainable forestry practices, in comparison with more intensively extractive approaches, maintain the natural capital of the Lake Superior basin?
- To what extent does the current configuration of community economies in the watershed allow for the long-term viability of resource policies?
- To what extent are current efforts to conserve energy and resources resulting in significant efficiencies for the amount of "waste" being discharged into the basin ecosystem?
- To what extent are local transitional economies (e.g., the shift from a mining- to an ecotourism-based structure) compatible with forecasted levels of supply and demand?
- To what extent does a change in demographic characteristics (e.g., the flight of younger generations in search of economic opportunities, the growth in the "second home" real estate market) affect the consumption of natural and social resources?

## INDICATOR AND PROJECTS

The DSC's work plan is intended to outline a series of short-term objectives and actions that could be initiated in the US and Canada to meet the goals of the Binational Program to Restore and Protect the Lake Superior Basin. The DSC has already accomplished the task of identifying a relatively small suite of sustainability indicators that may be used to guide the development of specific projects. Such indicators include:



- **Reinvestment in the Natural Capital of the Basin.** The DSC attempts to monitor the balance between what is extracted from the social and natural basis for life in the Basin with what is returned to the land and society. A variety of measurements have been suggested and/or tested: the amount of sustainable forestry occurring on the land; the extent of watershed management or restoration programs; native fisheries and wildlife stocking; exotic species control and native plant repatriation; reclamation of mining operations and industrial sites; replacement of wetlands and biotic diversity.
- **"Quality of Human Life" Indexes.** A range of social indicators, is being constructed to serve as a basis for projects intended to benefit the quality of life in the basin in accordance with other ecological or economic values. A variety of measurements have been suggested and/or tested: incidence of crime; demographics of migration (especially the loss of extended families in the Basin); demands for social services; transportation infrastructure status; extent of recreational and cultural opportunities; citizen involvement in decision making; public access to lakeshores; population density.
- **Resource Consumption Patterns.** The DSC considers the types and quantities of resources that are consumed in the basin. A variety of measurements have been suggested and/or tested: availability of recycling programs; amount of forest and mining resources that remain in the basin; types and quantities of electric power generation; quality and volume of aquifers; density of and stressors related to tourism; depletion of wildlife and fisheries; landfill capacity and incineration volume; degree of urban sprawl; loss of native flora.
- **Awareness of Capacity for Sustainability.** The DSC believes that we need to appreciate what people are learning in schools and organizations or from the media in order to implement a range of educational programs focusing on what sustainability means for those in the Basin. A variety of measurements have been suggested and/or tested: depth of environmental and sustainability education curricula in schools; promotion of resource conservation programs; incorporation of ecological design into building codes; extent of zoning regimes; popular support for environmental regulations; community outreach programs by natural resource agencies; media coverage of sustainability-related issues.
- **Economic Vitality Measures.** The DSC believes that the goals of the broader Binational Program can be well served by our understanding the threats and opportunities to the economic health of the watershed. A variety of measurements have been suggested and/or tested: per capita income; cost of living; extent of poverty; local employment trends; regional trade balance; diversity of community economies; facilitation of transitional economics; value-added industry; regional and local tax bases.

## UPCOMING PROJECTS

In addition to monitoring the status of sustainability in the Lake Superior Basin, the DSC has begun a small number of projects designed to enhance the watershed. In particular, the DSC is now in the process of securing funds to promote energy conservation, water conservation, and waste reduction throughout the Basin. Future projects include *an inventory of sustainable forestry programs, assistance with environmental education in area schools, and surveys of Basin resident's understandings of the link between sustainability and economic opportunity.*

## CONTACTS

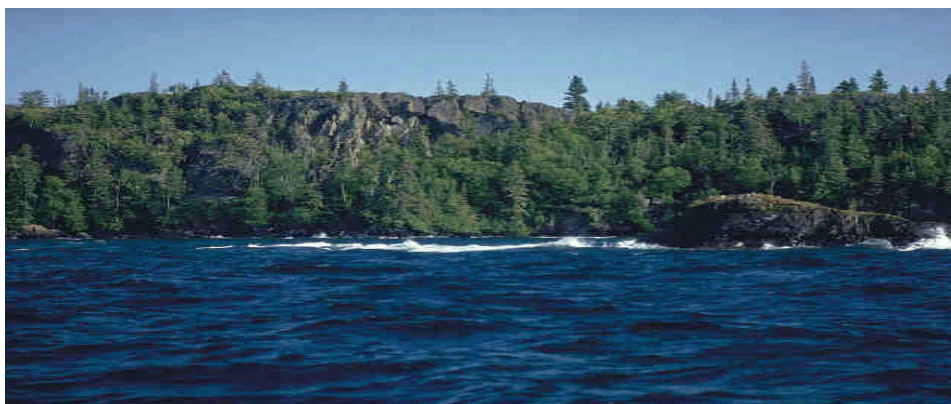
Those interested in the work of the DSC are urged to contact either the Canadian Co-Chair of the committee, Karl Schaefer, at (905) 336-4950, [karl.schaefer@ec.gc.ca](mailto:karl.schaefer@ec.gc.ca) or the United States Co-Chair, Jim Cantrill, at (906) 227-206, [jcantril@nmu.edu](mailto:jcantril@nmu.edu).



## LAKE SUPERIOR BINATIONAL PROGRAM



# HABITAT COMMITTEE



### **WHAT KINDS OF HABITAT ARE IMPORTANT TO THE LAKE SUPERIOR ECOSYSTEM?**

The Lake Superior basin - the lake and the land that drains into it, is home to a variety of plant and animal communities. Unlike people, who can adapt to many different climates and conditions, most plants and animals are found only in areas with a certain range of environmental conditions to live, reproduce and raise their young. These places and conditions are described as habitat. For some plants and animals, these conditions are very specific.

### **HOW HAVE PEOPLE AFFECTED THE HABITAT OF THE LAKE SUPERIOR BASIN?**

In the middle 1800s, the land around Lake Superior first rang with the sound of axes and shovels. The great pine forests surrounding the lake were felled and with them went significant areas of habitat for many plants and animals. Soil erosion, sawmill waste and mine tailings also damaged streams and coastal waters. Dams on rivers that flow into Lake Superior were constructed which eliminated spawning habitat for fish such as lake sturgeon and coaster brook trout.

## WHAT ARE THE CONSEQUENCES OF HABITAT LOSS?



- **Lake sturgeon** populations have dramatically declined in the past 100 years. Sturgeon spawn in tributaries to the lake. Barriers such as dams prevent them from reaching their spawning habitat.



- **Woodland caribou** were once plentiful on the north shore of Lake Superior, however fragmentation to boreal forests due to logging and road construction, has reduced their habitat allowing moose and white-tailed deer to populate the area. Deer carry the brain worm parasite that is deadly to caribou.



- The **piping plover** nests on sand or cobble beaches along the Great Lakes, however, this endangered species is losing habitat rapidly to beachfront development and recreational use of beaches.

## WHAT IS THE LAKE SUPERIOR BINATIONAL PROGRAM'S HABITAT COMMITTEE?

The Lake Superior Binational Program's Habitat Committee is a collaborative endeavor by Lake Superior resource managers to protect and restore Lake Superior habitat. The Habitat Committee is comprised of technical personnel from federal, provincial and state resource agencies and tribal authorities.

### HABITAT COMMITTEE GOALS

- Protect and maintain existing high-quality habitat sites in the Lake Superior basin and the ecosystem processes that sustain them.
- Restore degraded plant and animal habitat in the Lake Superior basin.

## WHAT IS THE HABITAT COMMITTEE DOING TO ACHIEVE ITS GOALS?

The Habitat Committee is working on a number of activities including:

- **Identification of Important Habitat Areas in the Lake Superior Basin** - A map showing important habitats around the basin was completed along with a brief summary of the status of habitat conditions. (<http://www.d.umn.edu/~pcollins/summary.html>)
- **The Lake Superior Decision Support Project** - is an effort to develop GIS-based decision support applications focused on the Lake Superior Basin. These applications are designed for use by a wide audience, including “local governments, regional planning agencies, resource management groups, educational and interpretative organizations, advocacy groups and individual citizens. (<http://lsgis.nrri.umn.edu>)
- **Strategic planning** across the entire basin to identify needed activities and implement projects to address these needs. (<http://www.d.umn.edu/~pcollins/stratpln.html>)

## SOME PROJECTS IN PARTNERSHIP WITH THE HABITAT COMMITTEE

- **McKeller River Embayment** - Thunder Bay’s McKeller River had been dredged and altered for commercial shipping, limiting the nearshore productive habitat. This restoration project created 3 hectares of diverse habitat for spawning fish.
- **Michigan Upper Peninsula Coastal Wetland Project** - A multi-phase, landscape scale project to protect, restore and manage coastal wetlands and associated uplands. The project focuses on preventing the destruction of coastal wetland areas and associated uplands through acquisition and easements.
- **Grassy Point Wetland Restoration** - Grassy Point is an area of over 100 acres of wetland and shallow open water habitat located in the St. Louis River Estuary in Duluth. The Grassy Point Wetland Restoration project is an effort to improve plant and animal habitat in a degraded wetland by removing waste left over from turn-of-the-century sawmills.
- **Superior Coastal Wetland Initiative** - Phase one of four projected phases emphasizes land stewardship combined with protection and restoration of more than 8,000 acres of wetland and 6,300 acres of upland in the Lake Superior watershed in Wisconsin. This project brings together natural resource agencies to combine technical, biological and cultural expertise. Reductions in non-point source pollution, land acquisition and conservation easements are protecting intact wetland areas.

There’s More! Visit our website at [http://www.d.umn.edu/~pcollins/bnp\\_hab.html](http://www.d.umn.edu/~pcollins/bnp_hab.html)

LAKE SUPERIOR BINATIONAL



PROGRAM

# TERRESTRIAL WILDLIFE COMMUNITY COMMITTEE



## TERRESTRIAL WILDLIFE IN THE LAKE SUPERIOR BASIN

All terrestrial animals, plants and microorganisms are considered as wildlife by the Terrestrial Wildlife Community Committee. There are thousands of species in the Lake Superior Basin, including many that are threatened, endangered or of special concern, as well as being important worldwide.

Wildlife includes many large mammals, such as Moose, Black Bear, Gray Wolf, White-tailed Deer and Caribou, plus more than 50 additional species of medium and small mammals. The most diverse group in the Basin is birds, including more than 200 breeding species. Most notable among the birds include **Bald Eagle**, Osprey, Northern Goshawk, Common Loon, Ruffed and Spruce Grouse, Piping Plover, Common Tern, Peregrine Falcon, Boreal Owl, and Great Gray Owl. According to breeding bird surveys, the highest diversity of breeding birds in the U.S. and Canada are found in the areas surrounding Lake Superior and the other Great Lakes.



The reptiles and amphibians of the basin are less diverse than mammals and birds and consist of about 25 species. Among the primary species of concern within the Basin include the wood turtle, but many concerns for frogs, **salamanders** and others are currently under study.



Much less is known about the vast array of invertebrates (e.g. insects, arachnids, and mollusks). Several species of **butterflies**, beetles, dragonflies, and other insects (many of which are not even described) remain a concern.

Information is available on many species of trees in the region, but there are many concerns about regeneration of White Pine, Hemlock, Red Oak, and Red Cedar. There are a wide variety of species of particular concern within the Basin, including grape ferns, orchids, various lilies, sedges and numerous other plants, about which little is known. Even less is known about the status of a host of other plant groups including lichens and fungi. Finally, there is an enormous gap in our knowledge about microorganisms. These include bacteria and other groups that are microscopic organisms found in soils and muck of the forests and wetlands.



## THE ROLE OF THE TERRESTRIAL WILDLIFE COMMUNITY COMMITTEE IN THE BINATIONAL PROGRAM

With interest in terrestrial plants, animals and microorganisms, the Terrestrial Wildlife Community Committee's mission *is to support a diverse, healthy, reproducing and sustainable native wildlife community in the Lake Superior Basin*. Fundamental to this mission is the development of a coordinated monitoring program to assess the health of Lake Superior basin plant and animal species and their environment. Species at risk (threatened or endangered) also need to be recovered.

### Several important principles guide the work of the Committee:

- Allow natural disturbances that are within natural variation.
- Manage land, using practices which mimic natural disturbances.
- Understand the relationship between wildlife and disturbance (both human and natural).
- Wildlife species are free of contamination.
- Prevent and control undesirable exotic species.
- Encourage the use of native species in all remedial projects.
- Provide adequate information to integrate wildlife values in economic development.

The ongoing and planned work of the committee is developed cooperatively with both the Habitat and Aquatic Community Committees. The committee will complete a variety of action each year, depending on funding. Many will be joint efforts to strike a balance between filling information needs (Inventory), basin-side coordination (Planning), protecting/restoring wildlife populations, measuring improvements (Monitoring), and communicating results. In some cases work will be addressed directly by the committee and in other cases the committee will encourage other agencies and organizations to complete the work.

## COMMITTEE PROJECTS

The Terrestrial Wildlife Community Committee will be working very closely with the other Ecosystem teams to complete the Ecosystem-based Lakewide Management Plan. While this will

be a major task, the Committee is also aggressively pursuing projects to meet its strategic plan objectives. Some examples of projects it will either undertake itself or endorse others to do include:

- Canvas existing ecosystem based monitoring programs.
- Support the Wisconsin and Michigan Upper Peninsula Coastal Wetland Protection projects.
- Determine the state of our knowledge and identify information gaps on invertebrates and microorganisms in terrestrial environments.
- Support projects that develop guidelines for protection of riparian areas and wetlands.
- Establish a network of protected, representative ecosystems across the Basin.

#### **CONTACT INFORMATION:**

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# HUMAN HEALTH COMMITTEE

## WHAT IS HUMAN HEALTH?

Over the past century, the concept of health has broadened from simply the absence of disease, or a more inclusive definition that emphasizes social and personal resources as well as physical capabilities. Therefore, a more recent definition of health is: “a complete state of physical, mental and social well-being” (Federal, Provincial, and Territorial Advisory Committee on Population Health, 1996). In recent years, the term “population health” has been used to describe an approach that focuses on the health of the whole population, and of subgroups within the complex interactions that exist among them. (Taken verbatim from: Health and Environment: Partners for Life, Health Canada, 1997)



## THE ROLE OF THE HUMAN HEALTH COMMITTEE IN THE BINATIONAL PROGRAM

The goals of the human health committee are to improve the Lakewide Management Program (LaMP) processes and documents with regards to human health; establish a mechanism for including human health in LaMP prioritization/comparative risk decision making and satisfy the concerns of the International Joint Commission, Lake Superior Binational Forum and ultimately the public that human health is being addressed in the Lake Superior LaMP.



**The committee integrates human health considerations into the Lake Superior LaMP through the following activities:**

- Reviewing existing LaMP work, to integrate “known” human health concerns in the process/documents, including connecting critical pollutants/action steps with the goals and objectives related to human health
- Review and update, if necessary, human health-related ecosystem objectives
- Review and update the list of human health-related indicators, and develop these indicators
- Identify data gaps in monitoring data needed for the development of these indicators.
- Develop a paper identifying human health issues of relevance to the Lake Superior LaMP, and updating the latest research findings, including what we know and don’t know (gaps in knowledge), and recommending the types of monitoring/research that would directly benefit the LaMP
- Identify areas where the public health evidence contradicts or does not support the inclusion of prioritization of certain pollutants or actions in the LaMP
- Incorporate human health considerations into future LaMP documents
- Liaison with Lake Superior Binational Forum, to access health expertise, and ensure needs are reflected

## **PRODUCTS OF THE HUMAN HEALTH COMMITTEE**

### **The human health committee has produced the following products:**

- Revised text for ecosystem objectives
- Initial set of human health-related indicators developed for Lake Superior basin
- Human Health Paper for LaMP 2000
- Draft annotated bibliography of human health/indicator studies, research, data sources

### **The human health committee has proposed the following products:**

- Contact list of human health experts to be included in a “health network” for the Lake Superior LaMP
- Human health website for Lake Superior LaMP

## **CONTACT INFORMATION**

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# THE LAKE SUPERIOR BINATIONAL PROGRAM

## WHAT IS THE LAKE SUPERIOR BINATIONAL PROGRAM?

The Binational Program to Restore and Protect the Lake Superior Basin began in 1991 through an agreement between the federal governments of Canada and the United States, the province of Ontario and the states of Michigan, Minnesota and Wisconsin. The administrative framework - through which these jurisdictions jointly act on the commitments identified in the agreement - is known as the Lake Superior Binational Program (LSBP).

The Lakewide Management Plan, or LaMP, is one of the products developed through the LSBP. The LaMP addresses commitments made by Canada and the United States under the Great Lakes Water Quality Agreement to restore and protect beneficial uses and to maintain the chemical, physical and biological integrity of the basin ecosystem.

### SCOPE

The physical scope of the Binational Program is the Lake Superior basin and the lands and waters within its watershed boundary. The program scope includes activities that affect the lake either directly or through impact on the basin. Some problems, including those whose origin may lie outside the basin (e.g. air-borne contaminants, exotic species), are being dealt with through other mechanisms. The LSBP will track progress on those issues. The Binational Program is intended to add value to existing and future programs and activities by linking initiatives and by coordinating efforts towards common objectives.



The importance of the cultural and spiritual aspirations of the human population around Lake Superior is also included in the LSBP as something to be considered in every activity and decision. The goals of economic and ecological sustainability are intertwined with the well-being of every citizen in the basin.

Check It Out!

The Lake Superior Binational Program has a website. Read about the Lake and Program activities; find reports and fact sheets; and learn about upcoming meetings and opportunities to participate!

Find it at either:

[www.cciw.ca/glimr/lakes/superior/](http://www.cciw.ca/glimr/lakes/superior/)

or

[www.epa.gov/glnpo/lakesuperior/](http://www.epa.gov/glnpo/lakesuperior/)



**For more information about the Lake Superior Binational Program, please view the Lake Superior Binational Program website at [www.cciw.ca/glimr/lakes/superior/](http://www.cciw.ca/glimr/lakes/superior/) or [www.epa.gov/glnpo/lakesuperior/](http://www.epa.gov/glnpo/lakesuperior/), or contact:**

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